

---

WMAP Cosmological Parameters

Model: lcdm

Data: wmap9+snls3

$10^9 \Delta_{\mathcal{R}}^2$	$2.367 \pm 0.095$	$H_0$	$71.3 \pm 1.9 \text{ km/s/Mpc}$
$\ell(\ell + 1)C_{220}/(2\pi)$	$5754 \pm 34 \mu\text{K}^2$	$d_A(z_{\text{eq}})$	$14240 \pm 110 \text{ Mpc}$
$d_A(z_*)$	$14075 \pm 111 \text{ Mpc}$	$D_v(z = 0.57)/r_s(z_d)$	$13.10 \pm 0.26$
$\eta$	$(6.23 \pm 0.13) \times 10^{-10}$	$k_{\text{eq}}$	$0.00979 \pm 0.00028$
$\ell_{\text{eq}}$	$137.7 \pm 3.0$	$\ell_*$	$302.20 \pm 0.64$
$n_b$	$(2.559 \pm 0.055) \times 10^{-7} \text{ cm}^{-3}$	$n_s$	$0.977 \pm 0.012$
$\Omega_b$	$0.0449 \pm 0.0020$	$\Omega_b h^2$	$0.02278 \pm 0.00049$
$\Omega_c$	$0.220 \pm 0.019$	$\Omega_c h^2$	$0.1113 \pm 0.0039$
$\Omega_\Lambda$	$0.735 \pm 0.020$	$\Omega_m$	$0.265 \pm 0.020$
$\Omega_m h^2$	$0.1341 \pm 0.0038$	$r_s(z_d)$	$152.8 \pm 1.2 \text{ Mpc}$
$r_s(z_d)/D_v(z = 0.106)$	$0.353 \pm 0.010$	$r_s(z_d)/D_v(z = 0.2)$	$0.1923 \pm 0.0052$
$r_s(z_d)/D_v(z = 0.35)$	$0.1153 \pm 0.0028$	$r_s(z_d)/D_v(z = 0.44)$	$0.0946 \pm 0.0021$
$r_s(z_d)/D_v(z = 0.54)$	$0.0798 \pm 0.0016$	$r_s(z_d)/D_v(z = 0.57)$	$0.0763 \pm 0.0015$
$r_s(z_d)/D_v(z = 0.6)$	$0.0733 \pm 0.0014$	$r_s(z_d)/D_v(z = 0.73)$	$0.0631 \pm 0.0011$
$r_s(z_*)$	$146.3^{+1.0}_{-1.1}$	$R$	$1.719 \pm 0.014$
$\sigma_8$	$0.812 \pm 0.022$	$\sigma_8 \Omega_m^{0.5}$	$0.418 \pm 0.025$
$\sigma_8 \Omega_m^{0.6}$	$0.366 \pm 0.024$	$\alpha_{\text{SNLS}}$	$1.43 \pm 0.11$
$\beta_{\text{SNLS}}$	$3.26 \pm 0.11$	$A_{\text{SZ}}$	$< 2.0 \text{ (95\% CL)}$
$t_0$	$13.70 \pm 0.11 \text{ Gyr}$	$\tau$	$0.091 \pm 0.014$
$\theta_*$	$0.010396 \pm 0.000022$	$\theta_*$	$0.5956 \pm 0.0013^\circ$
$\tau_{\text{rec}}$	$285.2 \pm 2.1$	$t_{\text{reion}}$	$450^{+63}_{-64} \text{ Myr}$
$t_*$	$378610^{+3592}_{-3604} \text{ yr}$	$z_d$	$1020.8 \pm 1.1$
$z_{\text{eq}}$	$3210^{+92}_{-91}$	$z_{\text{rec}}$	$1087.84 \pm 0.74$
$z_{\text{reion}}$	$10.7 \pm 1.1$	$z_*$	$1090.56 \pm 0.77$

---